June 5, 1998

D.T.E. 98-21

Petitions of Covad Communications Company, pursuant to Section 252(b) of the Telecommunications Act of 1996, for arbitration of an interconnection agreement between Covad and New England Telephone and Telegraph Company, d/b/a Bell Atlantic-Massachusetts.

APPEARANCES: Thomas Koutsky, Esq.

Covad Communications Company

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FOR: NEW ENGLAND TELEPHONE & TELEGRAPH

COMPANY d/b/a BELL ATLANTIC-MASSACHUSETTS

Respondent

I. INTRODUCTION

This is an arbitration proceeding between New England Telephone and Telegraph Company d/b/a Bell Atlantic ("Bell Atlantic") and Covad Communications Company ("Covad") being held pursuant to the Telecommunications Act of 1996 ("the Act"). It is designed to resolve issues necessary to finalize an interconnection agreement ("Agreement") between the parties.

This arbitration was initiated by a petition from Covad, dated February 11, 1998, in which Covad indicated an inability to reach agreement with Bell Atlantic on the issue of whether Bell Atlantic should be required to offer Covad cageless physical collocation. Under a cageless physical collocation arrangement, Covad would be permitted to locate termination equipment on Bell Atlantic's equipment racks, and Covad's personnel would be permitted to obtain access to that equipment. This contrasts with caged collocation, in which termination equipment is placed in a segregated physical space in the Bell Atlantic central office, and with virtual collocation¹, in which access by Covad personnel would not be permitted.

On April 9, 1998, Covad filed testimony of Charles J. McMinn, its chief executive officer, and Thomas J. Regan, its director of collocation. Bell Atlantic responded on May 11, 1998, with the testimony of Donald E. Albert, network services director of co-carrier implementation for Bell Atlantic

In a virtual collocation arrangement, the collocator purchases transmission equipment and sells this equipment to Bell Atlantic for a nominal fee. The equipment is installed by Bell Atlantic in the same space as Bell Atlantic's own central office transmission equipment. The collocator is responsible for overall system maintenance and remote monitoring and testing of its virtually collocated equipment. Bell Atlantic employees maintain the collocator's virtually collocated equipment in Bell Atlantic's central office under the direction and supervision of the collocator (Albert Testimony at 3-4).

Network Services Inc., and Karen Maguire, director of project management of large customer networks for Bell Atlantic. A technical conference was held on May 20, 1998, at the offices of the Department of Telecommunications and Energy ("Department"). At that conference, the arbitrator informed the parties that their filings with regard to the substantive issues in the case offered a complete record on which to base an award, but he encouraged them to file legal memoranda on the legal significance of Covad's interconnection agreement with US West Communications, Inc. ("US West") for the state of Washington, which includes a provision for cageless collocation. Those memoranda were filed on May 22, 1998.

II. POSITIONS OF THE PARTIES

A. Covad

Covad describes itself as a start-up competitive local exchange carrier ("CLEC") that has been granted authority to operate in six states. It intends solely to provide additional-line, dedicated high-speed digital services. Using digital subscriber line ("DSL") technology collocated in Bell Atlantic's central offices, Covad plans to provide business, consumers, and internet service providers ("ISPs") the ability to gain access to Covad's high speed digital and "plain-old" telephone service ("POTS") services over Bell Atlantic's local loops. Recognizing the geographic diversity of it potential customers, Covad's strategy is to provide blanket coverage of its DSL services in any geographic market it enters (McMinn Testimony at 3-4). Covad terms its offerings as "xDSL technologies" in that they cover a range of variants of DSL technologies that enable the provision of different combinations of symmetric and asymmetric high speed and very high speed digital and POTS basic telecommunications services over

ordinary copper loops (<u>id.</u> at 16). It notes that use of these technologies is particularly efficient for data transmission, in that they do not involve the circuit-switched fabric of the public switched telecommunications network (<u>id.</u> at 21).

Covad states that its entire business depends on obtaining collocation arrangements, xDSL loops, and other unbundled network elements ("UNEs") in a timely fashion from Bell Atlantic (<u>id.</u> at 22). Covad asserts that Bell Atlantic has been reluctant to reach an agreement with Covad because of Bell Atlantic's own interest in developing and marketing xDSL technologies (<u>id.</u> at 23-24). In particular, Covad seeks the right to obtain cageless physical collocation in each of the Bell Atlantic central offices. Cageless collocation would permit Covad to place its terminating equipment on the Bell Atlantic equipment racks and to allow its personnel to obtain access to that equipment. In contrast, caged collocation would provide a separated physical location for the CLEC's terminating equipment and would permit physical access by the CLEC to that space. Virtual collocation would provide a cageless, terminating presence for the CLEC on the Bell Atlantic equipment racks, but this equipment would be maintained by Bell Atlantic, with physical access prohibited to Covad personnel. The cageless collocation arrangement requested, Covad argues, would be easier and less expensive than caged physical collocation and at least as easy to provide as virtual collocation (<u>id.</u> at 24).

Covad states that Bell Atlantic has not disputed the feasibility of cageless collocation, but rather has responded to Covad's request by stating that it creates security problems and, in any event, is not required under the Act (<u>id.</u> at 25). Covad states that virtual collocation, the option offered by Bell Atlantic in place of caged collocation, is unsatisfactory because Covad would be required to reveal

many of its operations to Bell Atlantic; sell its equipment to Bell Atlantic, thus revealing the prices it pays for such equipment; train Bell Atlantic's personnel how to operate Covad's equipment; ask Bell Atlantic to service Covad's customers and reveal Covad's sign-up rate at each central office; and allow Bell Atlantic personnel to manipulate, examine, and potentially impair the use of all of Covad's equipment and potentially disrupt its entire network (id. at 25-26).

Covad further asserts that Bell Atlantic's security concerns are overstated and offers certain protection options which, it says, will meet both companies' security interests (<u>id.</u> at 26-27). Covad notes that it has been able to reach an agreement with US West that meets these security concerns and permits cageless collocation in Washington (<u>id.</u> at 27). Covad states that the lack of a similar agreement in Massachusetts has already started to have an effect on the company's competitive plans, in that there is not collocation space available in many central offices in the state (<u>id.</u> at 28-31).

Covad concludes that its agreement with US West provides substantial evidence that its proposed method of collocation is "technically feasible," as that term is defined by the Federal Communications Commission ("FCC") rules implementing the Act (<u>id.</u> at 32). Covad argues that this agreement, and the stipulation by US West to the Washington Commission that cageless physical collocation is feasible, are evidence of practicability that is so strong as to shift the burden of proof on this point to Bell Atlantic (<u>id.</u> at 37). Covad further argues that the Act does not mandate any one form of physical collocation and that the FCC only permits incumbent carriers to require reasonable security arrangement for CLEC collocation space (<u>id.</u> at 33). Covad points out that there are ways to address the security concerns raised by Bell Atlantic (Regan Testimony at 11). Covad raises the possibility of

video surveillance cameras, like those used in banks and automated teller machines; normal commercial arrangements, such as those used by Bell Atlantic in its management of central office security with third-party contractors; and security card access to central offices (<u>id.</u> at 17-19).

B. Bell Atlantic

Bell Atlantic does not dispute the technical feasibility of cageless physical collocation, but it argues that there are many operational problems with Covad's proposal, such as unintentional human errors, accountability to customers if equipment failures occur, and theft of equipment (Albert Testimony at 6-7). Bell Atlantic argues that, therefore, the Covad proposal should be rejected by the Department (id. at 2). Bell Atlantic notes that there are other ways for Covad to accomplish its purposes that do not suffer from these operational problems (id. at 11-15). Bell Atlantic states that these methods do not actually suffer from the deficiencies ascribed to them by Covad (Maguire Testimony at 9-12). Bell Atlantic also argues that Covad's interconnection agreement with US West does not carry any weight in this proceeding (Bell Atlantic Legal Memorandum at 5).

On the first point, Mr. Albert notes that, from a technical perspective, Covad is merely trying to place the transmission electronics of its xDSL equipment in central offices to gain access to Bell Atlantic's unbundled links, the same purpose for which other carriers have engaged in caged and virtual collocation in Bell Atlantic's central offices. He testifies that if Covad's request for cageless physical collocation is granted, not only Covad, but all other CLECs would be able to commingle their equipment with Bell Atlantic's equipment in Bell Atlantic's central offices. The implications of multiple carriers placing multiple pieces of equipment in the central offices would create serious security,

network reliability, operational, and accountability problems (Albert Testimony at 4-5). He describes a commingled cageless environment as "a ticking time bomb" in which even a well intentioned CLEC technician could mistakenly manipulate traffic-carrying Bell Atlantic equipment and disrupt service to thousands of subscribers (<u>id.</u> at 5-6). He also asserts that there is the potential for theft of Bell Atlantic portable test sets and plug-in equipment cards in unstaffed central offices (<u>id.</u> at 7). He notes that the presence of employees of multiple carriers would also create the potential for not being able to assign responsibility for network failures if and when they do occur (<u>id.</u> at 7-8).

Mr. Albert describes Covad's proposed security measures as inadequate. He notes that video surveillance and key-card access are reactive types of security that may identify the responsible party only after an incident has occurred; they will not prevent human errors that could occur if technicians work on the wrong equipment. Nor would they be likely to detect the unauthorized removal of Bell Atlantic test equipment and plug-ins. Mr. Albert states that commingling ignores Bell Atlantic's right to protect its network and that the company requires a prevention scheme rather than a detection or recovery system (<u>id.</u> at 8). He also notes that, contrary to Mr. Regan's testimony, third parties vendors do not have widespread access to Bell Atlantic's central offices. Those that do have such access in very controlled situations (<u>id.</u> at 15-16).

In addition to virtual collocation, Ms. McGuire states that Bell Atlantic offers a collocation option to CLECs where CLECs could physically collocate their facilities in a separate secured cageless location within Bell Atlantic's central offices, when space allowed (McGuire Testimony at 2).

Mr. Albert asserts that, if Covad feels that caged collocation is too costly, virtual collocation provides a reasonable alternative. He says that Covad's concerns with virtual collocation are not well-founded (id. at 11). He notes that it is less expensive than caged collocation and is just as fast to implement as Covad's requested cageless collocation and is available in all central offices (id. at 12-13, 14). He rebuts Covad's concern about Bell Atlantic technicians obtaining proprietary secrets as having no substance, noting that all CLECs have to provide certain information to Bell Atlantic to meet the technical requirements of the network and that, in any event, Bell Atlantic has contractual and statutory obligations to safeguard competitive information about Covad and its customers (id. at 13-14).

Ms. Maguire reports that Bell Atlantic has been able to fulfill Covad's requests for service via a 100 square foot caged collocation in 33 out of 41 central offices and in the remaining eight is reviewing whether there is space for a smaller (25 square foot) cage or a segregated cageless collocation area. If there is insufficient space, Bell Atlantic will offer virtual collocation in those central offices (Maguire Testimony at 4). She asserts that Bell Atlantic has had a good record for timeliness in delivering collocation cages, installing 31 of 33 cages on time in 1997, with an average interval of 69 business days and a commitment to deliver in 76 business days (id. at 5). She further notes that the costs that Covad has assumed for caged collocation are well above those being proposed by Bell Atlantic in Massachusetts (id. at 5-6). On the issue of virtual collocation, Ms. Maguire, like Mr. Albert, rebuts Covad's concerns and states that they do not seem relevant to the way virtual collocation is offered by Bell Atlantic (id. at 9-12).

Finally, on the legal question, Bell Atlantic asserts that the agreement of US West to provide cageless collocation to Covad is not relevant to this case. Bell Atlantic notes that the FCC has recognized the legitimate security interests of incumbent carriers and has concluded that physically separating collocating equipment from the incumbent's facilities was a reasonable means for addressing this concern (Bell Atlantic Legal Memorandum at 2). Bell Atlantic states that there is no issue of technical feasibility here in that the manner in which Covad gains access to Bell Atlantic's UNEs, and the technical and operational characteristics of the UNEs will be identical under either Covad's or Bell Atlantic's proposal. Thus, it argues, no evidentiary presumption arises from the US West agreement (id. at 4). The only difference would be the location of Covad's equipment within the central office. Bell Atlantic concludes that the fact that US West might be willing to site collocated space in a particular portion of its central office is an operational matter and is not entitled to any weight in this proceeding (id. at 4-5).

III. ANALYSIS AND FINDINGS

This is not the first time the Department has been asked to rule on whether Bell Atlantic should be required to provide CLECs with access to the Bell Atlantic network to install or use equipment in a manner not envisioned by the incumbent. In <u>Consolidated Arbitration</u>, D.P.U. 96-73/74, 96-75, 96-80/81, 96-83, 96-94 - Phase 3 (1996) ("<u>Phase 3 Order</u>"), certain CLECs requested the right to install remote switching modules in collocation space, and others requested the right to obtain access to dark fiber in the Bell Atlantic transmission and distribution system. In the case of remote switching modules, we viewed our obligation under the Act as making a determination as to whether the installation or

provision of such equipment "would result in a more efficient competitive market and would not result in any harm" to the incumbent. <u>Consolidated Arbitration, Phase 3 Order</u> at 36. In the case of dark fiber, we used a similar standard, investigating "whether it represents an essential discrete service whose lack of resale would represent a bar to effective competition in the Massachusetts telecommunications marketplace" and "whether it is physically practical to offer such a service." <u>Id.</u> at 43.

In this case, there is no dispute that the manner in which Covad has proposed to install collocation equipment is technically feasible. The main dispute, rather, is whether it raises valid security concerns with regard to the well being and efficient functioning of the underlying telecommunications network on Bell Atlantic, all CLECs, and on which all customers depend.

There is also no dispute as to whether Bell Atlantic is offering caged collocation, where space exists, and virtual collocation in all central offices. Covad, however, disputes the efficacy of those arrangements, in light of its business plans.

First, Covad has failed to establish that its proposal is necessary to promote competition. We note that we are not persuaded by Covad that the physical, virtual, or the secured cageless physical collocation options offered by Bell Atlantic are inimical to the commercial interests of Covad, or that the options presented by Bell Atlantic are inadequate for Covad's needs. In making its points in this regard, Covad seems to have relied on its experience in California, while the record here indicates a different story. The delivery of cages is more timely here than in California, and where physical space is not available, virtual collocation is. Likewise, the price of cages in Massachusetts is lower than that experienced by Covad in California; and in any event our local pricing will be established on a forward-

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looking basis in a pending Consolidated Arbitration Order. Bell Atlantic, in reponse to CLECs' concerns about the cost of caged collocation, has also agreed to make available secured cageless physical collocation arrangements in its Massachusetts central offices. Under this arrangement, Covad and other CLECs would share space, physically segregated from Bell Altantic equipment. This arrangement would be provided at a lower cost because the capital costs associated with building unique cages for each CLEC would be avoided (McGuire Testimony at 5; see also, Tr. 33, at 18-19, in the Consolidated Arbitration docket, D.P.U./D.T.E. 96-73/74, 96-75, 96-80/81, 96-83, 96-94).

Covad's concern about expropriation of competitively sensitive information by Bell Atlantic is similarly unpersuasive, in that the incumbent has strong legal obligations to protect such information, regardless of the form of collocation offered. 47 U.S.C. § 222(a-c). In short, Covad has not made a persuasive case that its proposed collocation arrangement is required to promote a competitive market.

Next we turn to the issue of security, and whether Covad's proposal would result in any harm to incumbent Bell Atlantic. In reviewing this issue, we accept Bell Atlantic's contention that our analysis must go beyond the instant case, i.e., whether Covad alone should have the access it desires. If we were to grant Covad permission to have commingled collocation equipment, other CLECs could persuasively argue that the nondiscrimination provisions of the Act would require that similar permission be granted to them. (We note, for example, that issues

surrounding collocation are still pending in the Consolidated Arbitrations between Bell Atlantic, AT&T, MCI, Sprint, TCG, and Brooks Fiber; so that the results of this proceeding would certainly be noted by, at a minimum, those parties.) Thus, we must consider the security issue in the context of multiple

CLECs having the same type of access as Covad. The number of CLEC personnel with access to Bell Atlantic's equipment would increase, with increased possibility of human error and damage to Bell Atlantic's central office facilities. We view this escalation as potentially uncontrollable and therefore unacceptable. In this context, we find that Bell Atlantic has offered compelling evidence that the commingling of CLEC collocation equipment with Bell Atlantic equipment, along with access to such equipment by CLEC personnel, raises intractable security problems.

Mr. Albert's testimony is persuasive that the types of security arrangements proposed by Covad are reactive rather than preventive. We are not willing to direct a physical arrangement that would increase the potential for third-party errors and theft in Bell Atlantic's central offices. The physical separation requirement that Bell Atlantic has imposed for CLEC physical collocation facilities is reasonable, in light of the reliance placed by all carriers and the public on the proper functioning of Bell Atlantic's central offices. See First Report and Order, Implementation of the Local Competition

Provisions in the Telecommunications Act of 1996, 11 FCC Rcd 15499, ¶ 598 (1996). Likewise,

Bell Atlantic's requirement to have its technical personnel, rather than CLEC personnel, operate and maintain virtual collocation equipment is reasonable, in light of that same reliance.

We accept that Covad and US West may have reached a different conclusion on the issue of security. We do not agree with Covad that the existence of that agreement creates a rebuttable presumption that a similar arrangement must be accepted where, as Bell Atlantic notes, there is no dispute here on the issue of technical feasibility. Even if we were to impose such an evidentiary standard, Bell Atlantic would have rebutted any such presumption. In any event, the Covad-US West

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agreement is merely evidence of practicality and is not conclusive on the point. The record evidence supports a conclusion that the security concerns raised by Bell Atlantic are valid and that Covad's proposed remedies to those concerns most likely would not be adequate. Indeed, Covad has not presented sufficient evidence of how security concerns are addressed in the US West agreement, and whether any implementation has been successful. For the reasons stated by Mr. Albert, the use of video surveillance cameras and key card security systems may not be insufficient to prevent damage to the network. Even if such systems permitted after-the-fact determinations of "who did what," that would not satisfy our need to ensure that our rulings do not jeopardize the proper functioning of the network for all carriers and the public.

In reaching this decision, the Department notes that it is particularly concerned that unnecessary barriers to entry slow the deployment of new technology. Our decision is expressly based on our reliance on Bell Atlantic's commitment for timely service in its interaction with CLECs, on the past performance of Bell Atlantic, as documented on this record, and on its promises for future timely and equitable treatment of CLEC collocation requests, also as set forth in this proceeding.² Our statutory duty requires vigilance against practices that may thwart the development of innovative technologies of

For example, on May 15, 1998, Teleport Communications Group filed a petition, docketed by the Department as DTE 98-58, requesting the creation of a process and deadlines for addressing LEC denials of physical collocation due to a lack of space. Under the Act, § 251(c)(6), an incumbent local exchange carrier must demonstrate [i.e., apply for an exemption to the requirement to provide physical collocation] to the state public utility commission that "physical collocation is not practical for technical reasons or because of space limitations" before being allowed to provide virtual collocation.

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the sort employed by Covad. Vigilance is especially warranted where an incumbent is capable of deploying competing service using similar technology.

In summary, we conclude that Covad's proposed cageless collocation arrangement would not result in a more efficient competitive market and would likely result in harm to the incumbent's telecommunication network. Covad's proposal is therefore denied.

IV. ORDER

After due consideration, it is

ORDERED: That the issues under consideration in this Order be determined as set forth in this Order; and it is

<u>FURTHER ORDERED</u>: That the parties incorporate these determinations into a final agreement, setting forth both the negotiated and arbitrated terms and conditions, to be filed with the Department pursuant to Section 252(e)(1) of the Act.

J. C.
Janet Gail Besser, Chair
James Connelly, Commissioner
W. Robert Keating, Commissioner

By Order of the Department.

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Paul B. Vasington, Commissioner